Exploring the Interplay Among Social Media Usage, Social Desirability, Narcissism, and Loneliness In Young Adults

This dissertation is submitted for the partial fulfillment for the degree of

M.SC. IN APPLIED PSYCHOLOGY

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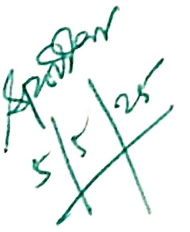

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CERTIFICATE

This is to certify that the dissertation entitled "Exploring the Interplay Among Social Media Usage, Social Desirability, Narcissism, and Loneliness In Young Adults" submitted by Miss Sohini Satiar, a 4th semester M.Sc. student in Applied Psychology (Specialization in Clinical Psychology), Sister Nivedita University, is a bona-fied work, which may be placed before the board of examiners for their evaluation. This is in partial fulfilment for the Degree of M.Sc. in Applied Psychology (Specialization in Clinical Psychology), Sister Nivedita University.

This is an original study done by the candidate and has not been submitted by her before in any form for any other degree of this University or any other University.

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"I, **Sohini Satiar**, hereby declare that the research work titled, "*Exploring the Interplay Among Social Media Usage, Social Desirability, Narcissism, and Loneliness In Young Adults*", conducted by me, has been completed with full honesty and integrity. I confirm that the work is original, and all sources of information have been appropriately acknowledged and cited. I affirm that the research work has undergone thorough plagiarism checks to ensure its authenticity. I take full responsibility for the content and findings presented in this research."

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ABSTRACT

Young adulthood is a dynamic and transitional period marked by significant personal growth and exploration. During this stage, individuals often take on new responsibilities and roles as they navigate education, careers, relationships, and increasing independence. It is a time of identity formation, where young adults seek to understand who they are and what they value, often balancing the expectations of society with their own aspirations. This phase is also characterized by emotional development, decision-making, and the establishment of long-term goals.

The aim of the present study is to explore the interplay among Social Media Usage, Social Desirability, Narcissism, and Loneliness in Young Adults. Along with the difference between males and females in respect to Social Media Usage, Social Desirability, Narcissism, and Loneliness.

The study was conducted on 99 young adults, 50 Females and 49 Males. Purposive sampling technique was used. Bergen Social Media Addiction Scale (BSMAS), Social Desirability Scale – 17 (SDS - 17), Narcissistic Personality Inventory – 16 (NPI - 16), UCLA Loneliness Scale Version 3 (UCLS - V3) were administered to collect data from the participants. For analysis, normality distribution, descriptive, inferential, correlation analyses were done.

Here exists a significant negative correlation between Social Desirability and Loneliness, suggesting that individuals who score higher in social desirability tend to report lower levels of loneliness. Besides this, there exists a nearly normal distribution across the variables. No significant difference found between males and females in terms of Social Media Usage, Social Desirability, Narcissism, and Loneliness. No significant correlation found among the variables Social Media Usage, Social Desirability, Narcissism, and Loneliness (except between Social Desirability and Loneliness).

Here, it is found that higher social desirability is linked to lower loneliness, implying that positive self-presentation may buffer feelings of isolation. These findings highlight the importance of fostering healthy social interactions in digital spaces. This present study requires deeper investigation for a better understanding about the relationship between the variables.

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CHAPTER I

INTRODUCTION

INTRODUCTION

Humans are social creatures. They interact and connect with others. The access to social media is an influential factor in the speedy interaction for engaging with a lot of people today. It helps to increase the connectivity with one another, on the other hand it can help to avail more opportunities in a lot of fields, i.e., business ideas, marketing advantages, community building, and so on. It facilitates connections across the world for a better understanding of different cultures, societies, and their history. Having social connections can reduce some levels of stress and anxiety; however, it can also pose a risk to mental health.

The rise of social media usage has significantly impacted human behavior. It influences how an individual represents himself/herself to the society and interact with others. Platforms like Instagram, Facebook, Messenger, Snapchat, Twitter, and TikTok offer users opportunities for self-expression, but they may also create environments which can lead to social desirability, narcissism, and feelings of loneliness. Research indicates that social media users often showcase idealized versions of themselves, motivated by a desire for positive recognition (Paulhus, 1984). Furthermore, the online environment may foster narcissistic behaviors, as individuals seek validation through likes, comments, and follower counts (Twenge & Campbell, 2009). On the contrary, excessive use of social media has been associated with increased feelings of loneliness and social isolation (Hunt, Marx, Lipson, & Young, 2018).

Social desirability refers to the tendency of individuals to respond to questions or behave in ways that they believe will be viewed favorably by others, rather than providing honest or accurate responses. This phenomenon is especially common in situations where individuals feel they are being evaluated or judged, such as in surveys, interviews, or psychological assessments. People may exaggerate positive traits or socially approved behaviors, like kindness or honesty, while minimizing or denying socially undesirable traits, such as prejudice or selfishness.

Narcissism is a personality style marked by an intense focus on oneself and one's own needs, often overlooking the needs and feelings of others. It typically involves an exaggerated sense of self-importance, a constant desire for admiration, and a noticeable lack of empathy. People with narcissistic traits may use others to achieve their own goals and often struggle to handle criticism.

Narcissism can be seen as a spectrum, ranging from healthy self-confidence to more extreme, dysfunctional expressions. There are generally two recognized forms of narcissism: grandiose and vulnerable.

(i) Grandiose Narcissism- This form is linked to traits like boldness, high energy, social dominance, a strong drive for rewards, and a willingness to take risks. Individuals showing grandiose narcissism often combine these characteristics with a tendency to be manipulative or antagonistic.

(ii) Vulnerable Narcissism- Vulnerable narcissism is associated with emotional sensitivity, social withdrawal, passivity, and a strong tendency toward feelings of anger or rage. It also stems from the same antagonistic traits but is paired with heightened emotional reactivity.

Loneliness is an unpleasant emotional response to perceived isolation. It is a complex emotional and psychological state characterized by a perceived discrepancy between the social connections one desires and those ones has, not merely about being alone but about feeling isolated, disconnected, or misunderstood, even when surrounded by others. Loneliness can arise from a lack of meaningful relationships, social rejection, or feeling unseen and unsupported.

People have now adopted social media, engaging for hours on Messenger, Instagram, Facebook, Snapchat and other apps. What causes this? When looking at social media patterns, there was a spike of 9% in 2019, bringing the total number of Facebook users to 3.484 billion. Keisler and his team report from their January 2020 study that social media users across platforms have a differing gender distribution. The report shows that LinkedIn and Facebook users tend to be more women, while 38% of Twitter accounts belonged to men, and 60% of Snapchat users are women. Social media is an essential part of every society worldwide. Like other advanced technology, social media has advantages and disadvantages, especially towards mental health. Previous literature suggests an age difference, but regardless, females suffer more from the weight of modern society than males.

This research explores the interplay among social media use, social desirability, narcissism, and loneliness among young adults and there is any significant difference between males and females in terms of social media usage, social desirability, narcissism, and loneliness. By exploring these

elements, this study adds to the growing body of literature on the psychological effects of social media and its consequences for mental health.

People began using social media more widely in the early 2000s with the rise of platforms like MySpace, Friendster, and then Facebook, which significantly increased social media adoption. According to recent data, there are approximately 5.2 billion active social media users worldwide, representing around 63.9% of the global population, with the average user spending roughly 2 hours and 20 minutes on social media daily; Facebook remains the leading platform with the most users, followed by YouTube, WhatsApp, and Instagram.

The widespread use of social media has significantly influenced patterns of self-presentation and interpersonal interaction in contemporary society. Research suggests that users often engage in selective self-presentation, shaped by social desirability motives, wherein individuals curate content to align with perceived societal expectations and norms. This tendency is particularly pronounced among individuals exhibiting narcissistic traits, who utilize social media as a platform for self-enhancement and the pursuit of external validation. Such behaviors, while aimed at increasing social approval, may paradoxically contribute to heightened feelings of loneliness, as online interactions frequently lack emotional depth and authenticity. These dynamics underscore the complex interplay between social media usage, personality traits, and psychosocial outcomes, warranting further investigation into their long-term psychological implications.

Social desirability plays a crucial role in shaping self-presentation, particularly in social and digital contexts. Individuals with narcissistic traits often exhibit a heightened concern with how they are perceived, leading to exaggerated efforts to appear socially competent, successful, or admirable. This drive for approval aligns closely with social desirability motives, as both involve managing one's image to gain external validation. However, the reliance on socially desirable self-presentation may result in superficial relationships and emotional disconnection, potentially contributing to feelings of loneliness. The discrepancy between an individual's curated persona and their authentic self can hinder the development of meaningful social bonds, suggesting a complex relationship between narcissism, social desirability, and loneliness that merits further empirical exploration.

Narcissism has been increasingly examined in the context of social media usage. Social media platforms provide opportunities for individuals with narcissistic traits to seek attention and

approval by carefully managing their online image. This behavior is closely tied to social desirability, as users often share content that portrays them in a positive light to gain social approval. Although these platforms can create a sense of social connection, the interactions are often shallow, which may actually deepen feelings of loneliness over time. As a result, narcissistic behaviors on social media, driven by the desire for validation, may ironically contribute to greater emotional isolation.

Individuals seeking validation or experiencing social isolation may engage in excessive social media use, potentially amplifying feelings of loneliness as they compare themselves to curated online personas or struggle to form meaningful connections. Social desirability can lead to further isolation as individuals may feel pressured to present a perfect image, hindering genuine interactions and contributing to feelings of inadequacy. Narcissistic individuals, on the other hand, may use social media to fuel their need for attention and admiration, potentially further isolating them from genuine social connections as they prioritize self-promotion over meaningful engagement.

In the digital age, social media has become a central platform for self-expression, social interaction, and identity construction. As individuals increasingly curate their online presence to gain approval and visibility, psychological constructs such as social desirability, narcissism, and loneliness have become highly relevant in understanding online behavior. So, here are some relevant psychological theories which can offer a valuable insight into the deeper understanding in the context of exploring the interplay among social media usage, social desirability, narcissism, and loneliness -

1. **Erikson's Psychosocial Development Theory**- According to Erik Erikson, young adulthood lasts from about 18 years to about 30 years. The ages in the adult stages are much fuzzier than in the childhood stages, and people may differ dramatically. The task is to achieve intimacy, as opposed to remaining in isolation. The virtue or psychosocial strength of this stage is love. In the context of his theory, it means being able to put aside differences and antagonisms through "mutuality of devotion". The malignancy is known as exclusion which refers to the tendency to isolate oneself from love, friendship, and community, and to develop a certain hatefulness in compensation for one's loneliness.

2. **Social Comparison Theory-** It is proposed by Festinger, 1954. This theory suggests that individuals evaluate themselves by comparing their lives to others. On social media, people often present idealized versions of themselves, leading users to engage in upward social comparison, which can result in feelings of inadequacy, low self-esteem, anxiety, and depression.

3. **Displaced Behavior Theory-** Displaced behavior theory discusses the idea that those who spend more time on social media have less time to communicate with people in person, which is something that doesn't exactly support mental health. This theory suggests, that perhaps it the absence of physical activity and face-to-face communication that has the harmful effects on mental health (Stockland, 2014).

4. **Uses and Gratifications Theory-** It is proposed by Blumler & Katz, 1974. This theory explores why people use media, including social platforms. It highlights that people turn to social media to fulfill specific needs — such as entertainment, social interaction, or validation. Excessive use to seek validation or escape reality can contribute to poor mental health outcomes, such as anxiety, depression, or addiction-like behaviors.

5. **Hyper-personal Communication Theory-** It is proposed by Walther, 1996. This theory explains how online communication can become more intense and personal than face-to-face interactions. Social media allows users to carefully edit messages and curate images, leading to idealized impressions and potentially unrealistic relationship expectations.

6. **Object Relation Theory-** It is proposed by Otto Kernberg, in contrast to Heinz Kohut's Self-Psychology. It proposes that individuals internalize their relationships with significant others, forming internal representations of the self and others that influence future interactions and emotional experiences. Narcissism may develop from early relational disturbances, leading to unstable self-concept and interpersonal relationships.

GENERAL MENTAL HEALTH OF YOUNG ADULTS:

The majority of young adults do not have a diagnosed mental illness. However, mild to moderate mental health challenges — such as stress, occasional anxiety, or periods of low mood — are very common and normal. These challenges are often situational (e.g., exams, breakups, work stress) and not always chronic or severe.

- *Stress Management-* Young adults juggle education, work, relationships, finances, and future planning, all contributing to everyday stress. Most cope well, but some experience over-whelm during peak periods (e.g., exams, job hunts).
- *Emotional Ups & Downs*- It's normal for young adults to have emotional highs and lows as they figure out their identities, careers, and relationships.
- *Self-Esteem & Confidence-* Many experience self-doubt during transitions (college to work, single to dating), but this tends to improve with life experience and support.
- *Loneliness & Social Connection-* Even mentally healthy young adults can feel lonely or isolated at times, especially if they've moved away from home, started a new job, or experienced social comparison via social media.
- *Uncertainty & Future Anxiety-* Most experience some level of worry about the future — career paths, financial security, and romantic relationships — but this is often manageable with support and perspective.
- *Resilience-* The majority of normal young adults develop coping skills over time and bounce back from stressors, breakups, or career setbacks.

IMPACT OF USING SOCIAL MEDIA ON YOUNG ADULTS:

Using social media can affect individuals physically as well as psychologically. Besides its effectiveness, there is a dark side of continuous excessive use of social media platforms. The consequences can hamper individual's social, occupational, and their daily life activities.

A. Physical effect-

1. **Poor Sleep Quality-**
    - Increased screen time, especially at night, disrupts melatonin production (the sleep hormone).

- Constant notifications and the urge to check apps before bed lead to shorter sleep duration and poorer sleep quality.
- Blue light exposure from screens can contribute to difficulty falling asleep.

2. Eye Strain & Digital Eye Syndrome-

- Staring at screens for long periods causes:
  - Eye fatigue
  - Dry or irritated eyes
  - Blurred vision (temporary)
- This is sometimes called Computer Vision Syndrome or Digital Eye Strain.

3. Neck, Shoulder & Back Pain ("Tech Neck")-

- Constantly looking down at phones or tablets puts strain on the neck, shoulders, and upper back.
- This posture, sometimes called tech neck, can lead to chronic pain or muscle stiffness.

4. Reduced Physical Activity-

- Time spent scrolling or engaging online often replaces physical movement.
- Sedentary behavior is linked to:
  - Weight gain
  - Increased risk of cardiovascular problems
  - Poor posture and muscle stiffness

5. Increased Risk of Headaches-

- Excessive screen time, especially in poor lighting or with prolonged focus, can trigger tension headaches.
- Eye strain combined with poor posture also contributes.

6. Sleep-Related Physical Effects-

- Lack of quality sleep (linked to late-night scrolling) can cause:
  - Fatigue during the day

- Weakened immune system
- Increased appetite and cravings for unhealthy food

7. Skin Issues-

- Some young adults develop acne or skin irritation from:
  - Constantly pressing phones to their faces (bacteria transfer).
  - Increased stress levels from social media drama (stress-related breakouts).

8. Other Potential Physical Impacts (Less Common but Notable)-

- Repetitive Behaviors- Some young adults, especially teens, have developed physical tics after excessive exposure to certain viral content (like TikTok videos featuring people with tics).
- Changes in Eating Habits- Exposure to unrealistic body ideals can lead to disordered eating patterns or extreme dieting.
- Increased Heart Rate/Stress Response- Exposure to distressing content (news, cyberbullying, social comparison) can activate the fight-or-flight response, leading to increased heart rate or tension.

B. Psychological effect-

1. Anxiety Disorders-

- Generalized Anxiety Disorder (GAD), social anxiety, and panic disorders are prevalent.
- Often linked to academic pressure, career uncertainty, financial stress, and social media use.

2. Depression-

- Persistent feelings of sadness, low energy, and lack of motivation.
- Can stem from isolation, academic/career pressures, relationship difficulties, and social comparison.

3. **Stress & Burnout-**
   - Academic burnout (in students) and workplace burnout (for early-career professionals) are increasingly common.
   - Chronic stress affects both mental and physical health.

4. **Substance Use Disorders-**
   - Some young adults turn to alcohol, drugs, or other substances as coping mechanisms.
   - This can both contribute to and worsen existing mental health problems.

5. **Eating Disorders-**
   - Body image issues, especially amplified by social media, contribute to disordered eating patterns.

6. **Sleep Disorders-**
   - Insomnia and poor sleep hygiene are common, linked to screen time, stress, and irregular routines.

7. **Loneliness & Social Isolation-**
   - Despite hyper-connectivity online, many young adults report high levels of loneliness.
   - This can contribute to depression and anxiety.

The Link Between Physical & Mental Health:

- Mental health struggles (like anxiety or low self-esteem) triggered by social media often manifest physically, e.g.:
    - Headaches from stress.
    - Digestive issues from anxiety.
    - Muscle tension.

- The mind-body connection means prolonged social media stress can directly impact physical health.

While social media has made it easier for people to connect and communicate, its excessive use has also been linked to various physical and mental health issues. As an emerging area of interest in today's society, social media usage has been widely studied across different age groups. However, there is still limited research exploring the relationship between social desirability, social media usage, narcissism, and loneliness. This gap highlights the need for more in-depth investigation to gain a clearer understanding of these connections. It is important for researchers to build on existing studies to identify areas where further exploration is needed and to deepen insights into these complex relationships.

CHAPTER II

REVIEW OF LITERATURE

REVIEW OF LITERATURE

A literature review, as defined by A.K. Singh in Tests, Measurements, and Research Methods in Behavioral Sciences, is a comprehensive and systematic examination of existing research, theories, and findings relevant to a specific topic. It involves identifying, analyzing, and synthesizing previous studies to understand the current state of knowledge, highlight gaps, and establish the foundation for new research. Singh emphasizes that a literature review is not just a summary but a critical evaluation that helps contextualize research questions, refine methodologies, and justify the need for further study.

1. SOCIAL MEDIA USE & SOCIAL DESIRABILITY-

The study titled "*Social networking in adolescents: time, type and motives of using, social desirability, and communication choices*" examines adolescents' use of social network use and voice communication, focusing on preferences and social desirability (n = 347). Snowball sampling method was used for this study, data was collected with SNS Time Using (by Pempek and McDaniel, 2016), Motivations to Use Facebook (20 items), Marlowe Crowne Social Desirability Scale (33 items), "Tell Me How You Communicate and I Will Tell You Who You Are", List of Communication Preferences. Most participants (83.6%) were aged 17–19 and female (68.9%). Adolescents spent over 3 hours daily on WhatsApp, 2 hours on Instagram, and 35 minutes on Facebook. Females used digital media more than males. In older adolescents (17-19 years), WhatsApp and voice communication were preferred than the younger adults (14-16 years). Younger teens showed more social desirability than the older ones. As the social desirability increases, the use of social networking sites in various platforms decreases. The sample is imbalanced to compare age and gender. Self-report bias may affect the results of social desirability (Tremolada et al., 2022).

The study titled "*The Influence of Social Media Engagement on Social Desirability and Empathy of Chinese Youth in Hong Kong*" explores the relationship between social media engagement, social desirability, and empathy among 224 Hong Kong Chinese youth (mean age = 20.24). Using the Social Media Engagement Scale, Marlowe Crowne Social Desirability-Short Form-Chinese

version, and Chinese-Interpersonal Reactivity Index scales, a mediation model analyzed via macro "PROCESS" of SPSS which revealed that social media engagement negatively relates to social desirability but positively to empathy. Social desirability positively correlates with empathy. While the direct effect of social media engagement on empathy is positive, its negative indirect effect via social desirability suppresses this relationship (Chui et al., 2024).

2. SOCIAL MEDIA USE & NARCISSISM-

Social media use has grown exponentially in recent years, especially amongst adolescents and young adults (Pew Research Center, 2014). Several studies have shown that social networking does indeed have an effect on self-esteem. This study titled "*The effect of social media use on narcissistic behavior*" posits that those who use social media more often are more likely to exhibit narcissistic behavior. Among 100 students, 99 participated voluntarily with age range of 18-25 years. The survey was administered in classrooms and public locations on the campus of a private, Midwestern University. The survey consisted of two parts – the first part contained questions assessing how much time the subject spends on the Internet, how many social media sites they use from a given list (Facebook, Twitter, Instagram, Pinterest, Tumblr, YikYak, Snapchat, LinkedIn, Google+, and Other), and how much time they spend on social media. The second portion of the survey was the Hypersensitive Narcissism Scale (HSNS) which contains ten questions (by Hendin & Cheek, 1997). Time spent on social media was significantly associated with higher HSNS scores. However, the number of social media sites/applications used was not shown to be significantly correlated with HSNS score. It appears as though social media may be correlated in some way with narcissistic traits, but perhaps not in a particularly strong manner (Somerville et al., 2015).

The study titled "*Narcissism and social media: The role of communal narcissism*" explores communal narcissism's relationship with social media use, focusing on Instagram, Reddit, and Twitter. A total of 334 participants (66.7% male, 32.3% female) were recruited from Amazon Mechanical Turk. To measure social media behavior, participants were asked some questions and rated accordingly, to measure communal narcissism, the Communal Narcissism Inventory (CNI - 16) was used, for agentic narcissism and control for its effects, the Narcissistic Personality Inventory (13 items) was used and for vulnerable narcissism, the Hypersensitive Narcissism scale

(HSNS) was used. A regression analysis revealed communal narcissism was linked to increased use of Instagram and Twitter but not Reddit. There is a positive association found with sharing content, valuing feedback, and rating self-presented content highly. Communal narcissism's impact was mediated by a desire for validation and higher content ratings, highlighting its significance in social media contexts. More research is needed to understand causal relationships of narcissism and social media use and a proper separation of different genders, age groups and cultures to generalize the overall effects (Kristinsdottir et al., 2021).

This study is characterized by vulnerable narcissism with oversensitivity, insecurity, and egocentrism. The study titled "*Social media use and vulnerable narcissism: The differential roles of oversensitivity and egocentricity*" of 115 participants from Manchester Metropolitan University (MMU) and the Greater Manchester area using the Hypersensitive Narcissism Scale (HSNS) and questions related to social media use revealed a two-factor model: oversensitivity and egocentrism. Oversensitivity correlated with greater social media use, posting frequency, sensitivity to feedback, jealousy, and self-presentation differences. Egocentrism linked to less concern over negative feedback and self-presentation differences. Findings highlight distinct roles of oversensitivity and egocentrism in shaping social media behaviors (Fegan et al., 2021).

3. SOCIAL MEDIA USE & LONELINESS-

The study titled "*Relationship between impulsivity, social media usage and loneliness*" explores the interplay between impulsivity, social media usage, and loneliness using data from 307 ((164 female, 143 male) university students. Data collection instruments of the study were the Barratt Impulsivity Scale Short Form (BIS-11-SF), Social Media Usage Scale (SMUS), and UCLA Loneliness Scale Short Form (ULS-8). It is observed that impulsivity significantly predicts increased social media usage, which, in turn, predicts heightened loneliness. Additionally, impulsivity indirectly influences loneliness via social media usage, underscoring the interconnected impact of these factors on loneliness (Savci et al., 2016).

The study entitled "*Social Media and Loneliness--Forever Connected*" examines Facebook usage and loneliness using self-report questionnaires. A sample of Ariel University students (n = 157; 75 men and 82 women) was selected. Students completed questionnaires including binary and

quantitative (most in Likert-type scale) questions. Facebook Usage Pattern Questionnaire, UCLA Loneliness Scale Revised Version were used to collect the data. Contrary to expectations and previous findings, no significant association was found between social media usage and loneliness among participants (Davidovitch et al., 2019).

The study entitled "*The Effect of Social Media Usage on Loneliness*" explores the impact of social media usage on loneliness, analyzing gender, age, and usage frequency. 118 women and 83 men voluntarily participated in this study. Social Media Use Scale and UCLA Loneliness Scale were used to collect the data. Findings reveal social integration and emotional connection in social media positively affect loneliness. Loneliness perception differs by internet usage frequency but not by gender or age. Heavy users show higher asocial tendencies than light users (Durucu et al., 2022).

4. NARCISSISM & SOCIAL DESIRABILITY-

A study entitled "*Adolescent narcissism, aggression, and prosocial behavior: The relevance of socially desirable responding*" explored how socially desirable responding affects self-reports of narcissism, aggression, and prosocial behavior in 161 at-risk adolescents aged 16–19. Social desirability was negatively linked to vulnerable narcissism and aggression and moderated the narcissism-aggression relationship. It showed no effect on prosocial behavior. Findings suggest social desirability may reduce reported aggression, but more research is needed to determine if this reflects actual behavior or underreporting (Barry et al., 2017).

5. NARCISSISM & LONELINESS-

A study titled "*Investigating pathological narcissism and loneliness, and the link with life satisfaction*" explored how pathological narcissism and personality traits relate to loneliness in 120 young adults. Narcissistic grandiosity and vulnerability were significantly associated with loneliness, but vulnerability and neuroticism uniquely predicted it. Loneliness also mediated the link between narcissistic vulnerability and lower life satisfaction. Findings suggest narcissistic vulnerability may be a key risk factor for loneliness (Kealy et al., 2022).

A study titled "*Loneliness and narcissism*" examined links between loneliness and narcissism focusing on specific facets of narcissism in 696 university students (321 women, 375 men). Three-Item Loneliness Scale (TILS; Hughes et al. 2004), Five Factor Narcissism Inventory (FFNI; Glover et al. 2012) were used to collect the data. Loneliness showed varying correlations with narcissism facets—strongly positive with shame, admiration need, and distrust, and strongly negative with indifference. Latent profile analysis revealed that students high in shame, admiration need, and related traits reported greater loneliness. These findings enhance understanding of how specific narcissistic traits relate to loneliness (MacDonald et al., 2023).

6. SOCIAL DESIRABILITY & LONELINESS-

A study titled "*The interrelationship of loneliness, social desirability and academic achievement in Myanmar adolescents: Viewing social desirability from adjustment approach*" examined the links between loneliness, social desirability, and academic achievement among 549 Myanmar adolescents. The adapted versions of Loneliness Rating Scale developed by Asher, Hymel, and Renshaw (1984) and Marlowe-Crowne Social Desirability Scale were used to measure loneliness and social desirability. Results showed loneliness was negatively related to both social desirability and academic performance, while social desirability positively correlated with academic achievement (Mo, T. S., 2019).

7. GENDER DIFFERENCE-

A comprehensive meta-analysis titled "*Gender differences in narcissism: a meta-analytic review*" (k = 355 studies, N = 470,846) grounded in biosocial approach to social role theory found that men are generally more narcissistic than women (d = .26) over time across various age groups. This difference is primarily driven by the Exploitative/Entitlement (d = .29, k = 44 studies; N = 44,108) and Leadership/Authority (d = .20, k = 40 studies; N = 44,739) facets of the Narcissistic Personality Inventory, while the Grandiose/Exhibitionism facet showed a minimal gender gap (d = .04). No significant difference was found in vulnerable narcissism (d = −.04). Study 2 (N = 19,001) used item response theory to eliminate measurement bias, confirming these gender differences as genuine and stable over time, with implications for

leadership, aggression, and clinical understanding [k = no. of independent studies] (Grijalva et al., 2015).

A study titled "*The interrelationship of loneliness, social desirability and academic achievement in Myanmar adolescents: Viewing social desirability from adjustment approach*" aimed at investigating the interrelationship of loneliness, social desirability and academic achievement of adolescents in Myanmar. 549 students from two selected high schools participated in this study. The adapted versions of Loneliness Rating Scale developed by Asher, Hymel, and Renshaw (1984) and Marlowe-Crowne Social Desirability Scale were used to measure loneliness and social desirability. No gender differences emerged in loneliness, but girls scored higher in social desirability than boys (Mo, T. S., 2019).

This study examines gender differences in social media usage among ten postgraduate students at Queensland University of Technology (6 males, 4 females). It identifies nine themes and 41 codes, focusing on five major themes: personal life, professional life, sharing, leadership or followership, and competition. Qualitative method was used to collect the data. The study finds males are more likely to share news, while females are more likely to initiate discussions and feel challenged by social media. It highlights how gender influences motivation, competition, and information handling on different platforms (Ashkan et al., 2020).

In conclusion, it can be said that it becomes one of the most concerning areas to study as the gradual increase of usage of social media is observed among young adults. Some of the previous studies suggest no significant relationship between the social media use and narcissism and loneliness, on the other hand it is observed that some of the studies suggest that there is a positive relationship between social media usage, narcissism and loneliness. In the area of social desirability, there is a lack of detailed study found. Previous researchers found that there is a negative correlation between social desirability and social media usage, narcissism, and loneliness. Few studies have employed experimental designs, without using standardized tools. Many surveys were taken via online mode which may not accurately capture real-world behaviors. Thus, further research is required to ascertain whether this finding reflects genuine behavioral patterns or is a result of underreporting or exaggeration.

CHAPTER III

RESEARCH METHODOLOGY

RESEARCH METHODOLOGY

Research methodology may be understood as the science of studying how the research is conducted. It is mainly a way to systematically solve research problems. For the smooth conduct of research, the methodology contains the various steps that are generally adopted by a researcher in studying the research problem with a suitable rationale. Researcher designs a methodology specific to the problem to be solved because research methodology will differ from problem to problem.

The aim of the present study is to explore the interplay among Social Media Usage, Social Desirability, Narcissism, and Loneliness in young adults.

In the present study, an attempt has been made to compare males and females on the basis of four dimensions: social media usage, narcissism, social desirability, and loneliness.

OBJECTIVES:

The present study was aimed –

- To find out if there is any significant relation between social media usage and narcissism.
- To find out if there is any significant relation between social media usage and social desirability.
- To find out if there is any significant relation between social media usage and loneliness.
- To find out if there is any significant relation between narcissism and social desirability.
- To find out if there is any significant relation between narcissism and loneliness.
- To find out if there is any significant relation between social desirability and loneliness.
- To find out if there is any significant difference between males and females, in terms of social media usage.
- To find out if there is any significant difference between males and females, in terms of narcissism.
- To find out if there is any significant difference between males and females, in terms of social desirability.
- To find out if there is any significant difference between males and females, in terms of loneliness.

HYPOTHESIS:

On the basis of previous studies, following hypotheses were formulated-

H1: There is a significant relation between social media usage and narcissism.

H2: There is a significant relation between social media usage and social desirability.

H3: There is a significant relation between social media usage and loneliness.

H4: There is a significant relation between narcissism and social desirability.

H5: There is a significant relation between narcissism and loneliness.

H6: There is a significant relation between social desirability and loneliness.

H7: There is a significant difference between males and females, in terms of social media usage.

H8: There is a significant difference between males and females, in terms of narcissism.

H9: There is a significant difference between males and females, in terms of social desirability.

H10: There is a significant difference between males and females, in terms of loneliness.

For the present study these dimensions have defined operationally-

OPERATIONAL DEFINITIONS:

Social media- Social media are forms of digital communication through which users create online communities to share information, ideas, personal messages, and other content (APA Dictionary of Psychology, n.d.). These are forms of media that allow people to communicate and share information using the internet or mobile phones: blogs, podcasts and other forms of social media are creating new opportunities for entrepreneurs to reach the public (Cambridge University Dictionary, n.d.).

Narcissism- Narcissism refers to excessive self-love and egocentrism. In psychoanalytic theory, the taking of one's own ego or body as a sexual object or focus of the libido or the seeking or choice of another for relational purposes on the basis of their similarity to the self (APA Dictionary of Psychology, n.d.).

Social Desirability- Social desirability refers to the extent to which someone or something (a trait, attribute, or the like) is admired or considered valuable within a social group. It can be explained as the bias or tendency of individuals to present themselves in a manner that will be viewed favorably by others. In an experiment, for example, it manifests as the social desirability response set, which is the tendency of participants to give answers that are in accordance with social norms or the perceived desires of the researcher rather than genuinely representative of their views. This is a confound to be controlled for in certain research, as it often reduces the validity of interviews, questionnaires, and other self-reports (APA Dictionary of Psychology, n.d.).

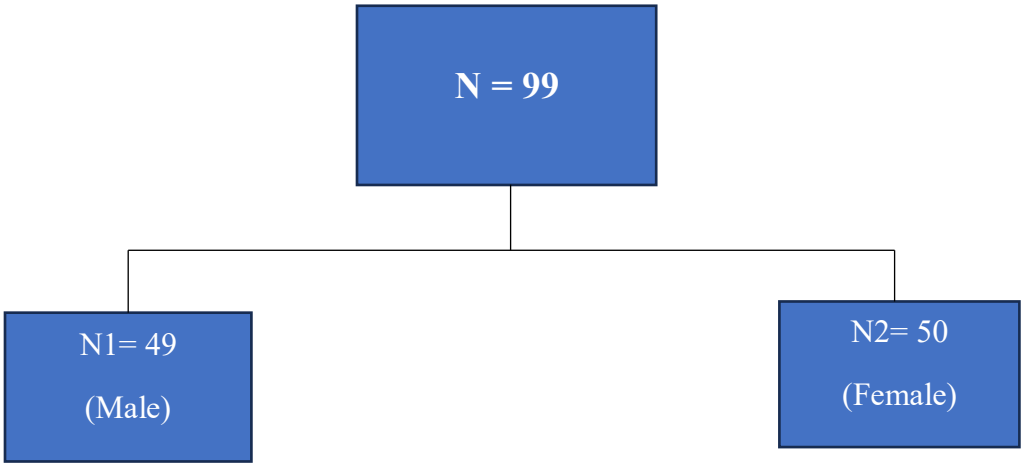
Loneliness- Loneliness refers to affective and cognitive discomfort or uneasiness from being or perceiving oneself to be alone or otherwise solitary. Psychological theory and research offer multiple perspectives: Social psychology emphasizes the emotional distress that results when inherent needs for intimacy and companionship are not met; cognitive psychology emphasizes the unpleasant and unsettling experience that results from a perceived discrepancy (i.e., deficiency in quantity or quality) between an individual's desired and actual social relationships. Psychologists from the existential or humanistic perspectives may see loneliness as an inevitable, painful aspect of the human condition that nevertheless may contribute to increased self-awareness and renewal (APA Dictionary of Psychology, n.d.).

Young adults- Adulthood refers the period of human development in which full physical growth and maturity have been achieved and certain biological, cognitive, social, personality, and other changes associated with the aging process occur. Beginning after adolescence, adulthood is sometimes divided into young adulthood (roughly 20 to 35 years of age); middle adulthood (about 36 to 64 years); and later adulthood (age 65 and beyond). The last is sometimes subdivided into young-old individuals (65 to 74), old-old individuals (75 to 84), and oldest old individuals (85 and beyond). The oldest old group is the fastest growing segment of the population in many developed countries (APA Dictionary of Psychology, n.d.).

METHODS:

Sample-

The purposive sampling technique was used for present study. A total number of 118 participants were approached among which 110 participants were signed in consent form and filled up the questionnaire booklet. Out of 110 participants, 8 participants did not return the questionnaire and 3 participants (who have chronic psychological illness/ condition) submitted the filled-up questionnaire. From this pool of data 99 usable data were selected for the present study. The total sample was divided on the basis of male and female category.



The participants were selected on the basis of following inclusion and exclusion criteria:

Inclusion criteria:

- Participants can be married and unmarried.
- Age range: 18-30 years
- All socio-economic statuses are represented.
- Participants must have a smartphone.
- Must have an understanding of English.

Exclusion criteria:

- Participants below 18 and above 30 years of age.
- Those who belong to psychology background.
- Those who don't understand English.
- Those who have any physical or psychological problems.

DESCRIPTION OF THE TOOLS:

I. Demographic details-

An information schedule was used to gather demographic details – name, age, gender, sex, religion, educational qualification, occupation, type of family (nuclear, extended, joint, broken-home), type of residential area (urban, sub-urban, rural), relationship status (married, unmarried, separated), monthly income, presence of diagnosed chronic physical or psychological illness/ condition, under regular medications or not, date, place, e-mail id, and contact no.

II. Bergen Social Media Addiction Scale (BSMAS):

Description-

It was developed by Cecilie Schou Andreassen and colleagues at the University of Bergen, Norway, in 2016. It is inspired by Bergen Facebook Addiction Scale (BFAS) (2012). This scale is a quantitative measure of social media usage. Each of the six items represents six dimensions: Salience, Tolerance, Mood modification, Relapse, Withdrawal and Conflict. The internal reliability of the scale is Cronbach's $\alpha = 0.88$.

The BSMAS assesses PSMU behaviors over a twelve-month period, using six items rated on a 5-point Likert scale ranging from 1 (very rarely) to 5 (very often). Total possible scores range from 6 to 30, with higher scores indicating higher Problematic Social Media Use.

III. SOCIAL DESIRABILITY SCALE-17 (SDS-17):

Description-

It was developed by Stöber, J. and colleagues at the University of Keil, Germany, in 2001. This scale is a quantitative measure of social desirability. Stöber (1999) decided to construct an alternative scale to the Marlowe-Crowne Social Desirability Scale with up-to-date content. The reliability of the scale is Cronbach's $\alpha = 0.75$.

Originally, the SDS-17 contained 17 items, thus its name (Stöber, 1999). Further validation studies, however, showed that one item on drug use consistently showed item-total correlations near zero (Stöber, 2001) so that the revised scale now contains only 16 items. These items were given in a true/false answer format. High scores indicate the high possibility of social desirability.

IV. NARCISSISTIC PERSONALITY INVENTORY-16 (NPI-16):

Description-

It was developed by Daniel R. Ames (Columbia University, USA), Paul Rose (Union College, USA), Cameron P. Anderson (New York University, USA) in 2006. This scale is a quantitative measure of subclinical narcissism. This scale is a shorter version of Narcissistic Personality Inventory-40 (Raskin & Terry, 1988). The reliability of the scale is Cronbach's $\alpha = 0.72$.

NPI-16 instructs respondents to read 16 pairs of statements and choose the one that comes closest to describing their true feelings or beliefs. The paired statements were given numerical values of zero (0) and one (1), with a score of one assigned to the more narcissistic statement. High scores indicate high tendencies of high narcissism.

V. UCLA LONELINESS SCALE VERSION-3 (UCLS-V3):

Description-

It was developed by Russell and colleagues at University of California, in 1996. This scale is a quantitative measure of loneliness. The initial version of the UCLA Loneliness Scale

consisted of 20 statements that reflected how lonely individuals described their experience (Russell et al., 1978). The internal reliability of the scale (α) ranges from 0.89 to 0.94.

UCLA Loneliness Scale Version-3 consists of 20 items in which there are 11 negatively worded (lonely) and 9 positively, worded (non-lonely) items. The items are rated on 4-point Likert Scale ranging from Never (1) to Always (4), with higher scores indicating high tendency of high loneliness.

PROCEDURE FOR DATA COLLECTION:

All the participants were contacted personally and rapport was established thoroughly. After that the consent forms were signed. They were given a briefing about the purpose of the present study. Instructions were given as per the questionnaires. They were being assured of keeping the details confidential and used for only academic purpose. They were requested to answer the questions properly with honesty. Then the scales were administered and data was collected.

STATISTICAL ANALYSIS:

For the data analysis purpose of the present study, Jamovi Software Version 2.4.14 was used, in which normality distribution, descriptive, inferential, correlation analyses were made according to the decision rules for testing the alternative hypotheses.

In the first phase, Normality of the distribution (Shapiro-Wilk test) was observed.

In the second phase, Mean, Median, Mode, SD (Descriptive Statistics) were calculated.

In the third phase, the data were subjected to large independent sample t-test to find the significant difference between males and females in terms of social media usage, social desirability, narcissism, and loneliness.

Lastly, Pearson Product Moment Correlation was done to find out the relationship among all the variables: social media usage, social desirability, narcissism, and loneliness.

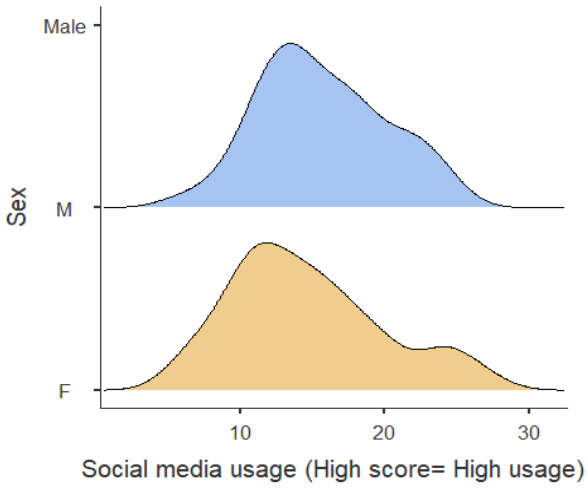
CHAPTER IV

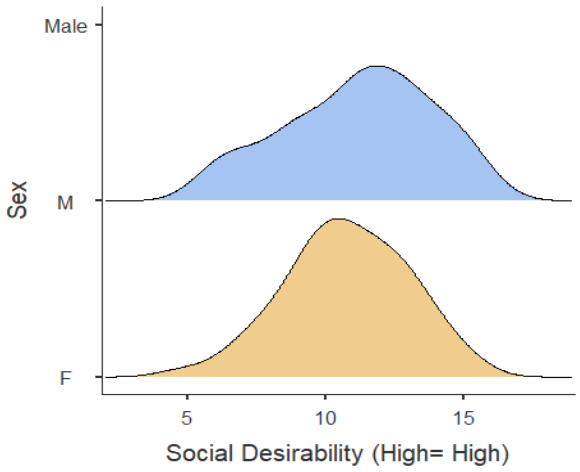
RESULTS

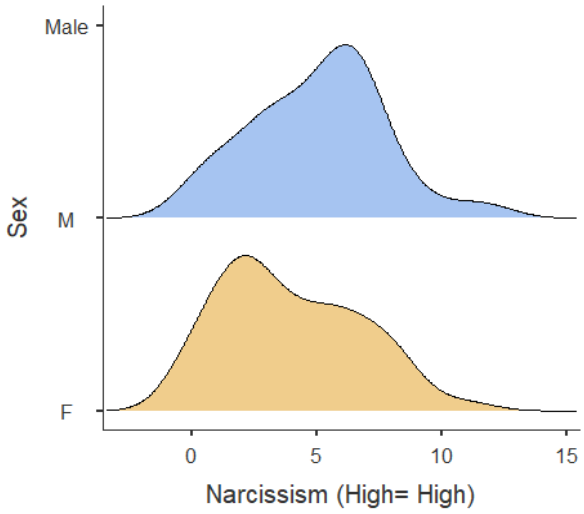
TABLE-1: RESULTS ON NORMALITY DISTRIBUTION

	Sex	Social Media Usage	Social Desirability	Narcissism	Loneliness
N	M	49	49	49	49
	F	50	50	50	50
Mean	M	15.7	11.2	5.06	46.9
	F	14.6	10.8	3.96	45.3
Skewness	M	0.213	-0.304	0.140	0.400
	F	0.595	-0.237	0.449	0.367
Std. error skewness	M	0.340	0.340	0.340	0.340
	F	0.337	0.337	0.337	0.337
Kurtosis	M	-0.540	0.693	0.107	0.501
	F	-0.269	-0.111	-0.617	-0.667
Std. error kurtosis	M	0.668	0.668	0.668	0.668
	F	0.662	0.662	0.662	0.662
Shapiro-Wilk W	M	0.968	0.959	0.963	0.986
	F	0.952	0.975	0.944	0.965
Shapiro-Wilk P	M	0.208	0.083	0.125	0.822
	F	0.041	0.358	0.020	0.147

Table No. 1 represents normality distribution using Shapiro-Wilk test for males and females participants across all the variables: Social Media Usage, Social Desirability, Narcissism and Loneliness.


Male
Sex
M
F
10
20
30
Social media usage (High score= High usage)


Male
Sex
M
F
5
10
15
Social Desirability (High= High)


Male
Sex
M
F
0
5
10
15
Narcissism (High= High)

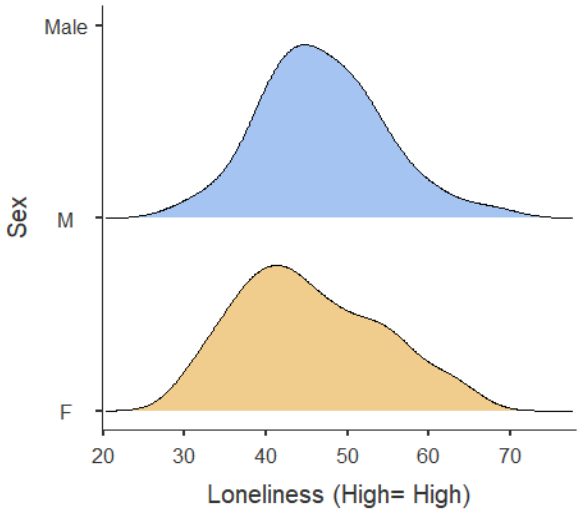

Male
Sex
M
F
20
30
40
50
60
70
Loneliness (High= High)

TABLE-2: RESULTS ON DESCRIPTIVE STATISTICS

	Sex	Social Media Usage	Social Desirability	Narcissism	Loneliness
N	M	49	49	49	49
	F	50	50	50	50
Mean	M	15.7	11.2	5.06	46.9
	F	14.6	10.8	3.96	45.3
Median	M	15	11	5	46
	F	14.0	11.0	3.50	43.5
Mode	M	18.0	11.0	7.00	42.0
	F	11.0	10.0	2.00	42.0
Standard deviation	M	4.36	2.67	2.66	7.55
	F	5.30	2.20	2.76	8.70

Table No. 2 represents Descriptive statistics (Mean, Median, Mode & Standard deviation) comparing Social Media Usage, Social Desirability, Narcissism and Loneliness among Males and Females.

Graphical representation of mean of Social Media Usage, Social Desirability, Narcissism & Loneliness:

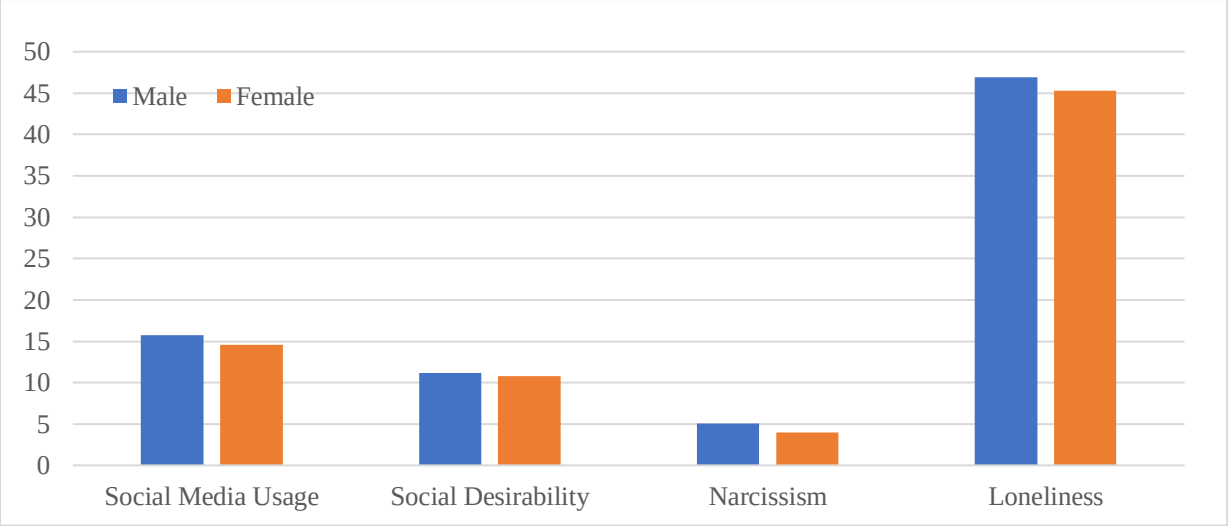


TABLE-3: RESULTS ON T-TEST

INDEPENDENT SAMPLES T-TEST:

		Statistic	df	p
Social Media Usage	Student's t	1.055	98.0	0.294
Social Desirability	Student's t	0.822	98.0	0.413
Narcissism	Student's t	1.916	98.0	0.058
Loneliness	Student's t	1.055	98.0	0.294

Table No. 3, Independent t-tests were used to compare males and females on each of the four variables: Social Media Usage, Social Desirability, Narcissism, Loneliness. It indicates that there is no significant difference between males and females, in terms of social media Usage, Social desirability, and Loneliness. So, therefore **H7, H8, H9, H10** are rejected.

TABLE-4: RESULTS ON CORRELATION MATRIX

		Social Media Usage	Social Desirability	Narcissism
Social Desirability	Pearson's r	-0.118	—	
	df	98	—	
	p-value	0.240	—	
Narcissism	Pearson's r	0.071	-0.030	—
	df	98	98	—
	p-value	0.482	0.765	—
Loneliness	Pearson's r	0.165	-0.232	0.167
	df	98	98	98
	p-value	0.102	0.020	0.097

Table No. 4, Pearson correlation analysis examines the relationships among Social Media Usage, Social Desirability, Narcissism, and Loneliness. It indicates there is no significant correlation among most of the variables ($p > 0.05$), indicating weak correlations. The only significant correlation was a negative relationship between Social Desirability and Loneliness ($r = -0.232$, $p = 0.020$), suggesting that individuals who score higher in social desirability tend to report lower levels of loneliness. All other correlations were weak and insignificant, indicating that these psychological constructs may operate independently in this sample. So, therefore **H1, H2, H3, H4, H5** are rejected and **H6** is accepted.

CHAPTER V

DISCUSSION

DISCUSSION

The present study aims to explore interrelationships among Social Media Usage, Social Desirability, Narcissism, and Loneliness and gender differences among the mentioned variables. The findings across all four tables provide a comprehensive overview of these psychological constructs measured.

Discussion on Normality of the Distribution:

From the above normality table, it can be seen that skewness and kurtosis for all the variables- Social Media Usage, Social Desirability, Narcissism, and Loneliness fall within the acceptable range (-1 to +1), indicating approximate normal distribution. Shapiro-Wilk test results show that most variables are not significantly deviate from normality ($p > 0.05$), except for Social Desirability ($p = 0.041$) and Narcissism ($p = 0.020$) in females, suggesting some deviation in these cases. Overall, the data can be justifiable as normally distributed. Since the sample size is relatively small ($n = 99$) and nearly equal number of male and female participants (Male= 49, Female = 50) voluntarily participated, it may be one of the reasons of approximate normal distributions. The psychological scales used are likely well validated with normally distributed populations. The sample consists of general non-clinical participants which is because there is less likely any distortion in normality distribution.

Discussion on Descriptive Statistics:

From the above descriptive table, it can be observed that males scored slightly higher than females. There is no significant difference between males and females, in terms of social media usage, narcissism, social desirability and loneliness. Differences in means are minimal, but there is a marginal trend toward higher narcissism observed in male population. Presenting mean, median and mode can help in understanding the distribution further; on the other hand, standard deviation offers insight into the spread of responses. The mean values for males and females are reported separately. This gender-based breakdown is commonly used to explore potential differences by genders. For example, males show a mean of 15.7 in Social Media Usage compared to females with 14.6; as social media use has become nearly universal, especially among young adults, it tends to reduce the gender gap in its usage patterns. In case of social desirability, males show a mean of 11.2 whereas females show a mean of 10.8 which may reflect a higher tendency in males

to be appeared in a more socially favorable way than females. Men tend to show themselves in more favorable way than females do because of their societal values. In narcissism, for males there is a mean of 5.06, for females there is a mean of 3.96 which may because of the social or environmental factors of the participants. Traditionally or according to the societal norms, males are more encouraged to develop the traits related to narcissism than females which is because there might be a tendency of showing higher narcissistic traits by males than females. Males show a mean of 46.9 in Loneliness to females with a mean of 45.3, may be a reflection of social stigma against males for expressing their emotional needs.

Discussion on comparison Male and Female with respect to Social Media Usage, Social Desirability, Narcissism & Loneliness:

From the above t-test table, it can be seen that there is no significant difference between males and females, in terms of Social Media Usage, Social desirability, Narcissism, and Loneliness. For Social Media Usage, the t-value is 1.055 with a p-value of 0.294 ($p > 0.05$). So, there is no significant difference between males and females found, in terms of social media usage (H7 rejected). As the availability of social media usage becomes universal, both males and females use it equally. Similarly for Social Desirability t-value = 0.822, p-value = 0.413 ($p > 0.05$). There is also no significant difference between males and females, in terms of social desirability (H9 rejected). In case of Loneliness, t-value = 1.055, p-value = 0.294 ($p > 0.05$). So, there is no significant difference found in between males and females, in terms of loneliness (H10 rejected). A study titled "*The interrelationship of loneliness, social desirability and academic achievement in Myanmar adolescents: Viewing social desirability from adjustment approach*" examined the links between loneliness, social desirability, and academic achievement among 549 Myanmar adolescents. No significant gender differences emerged in loneliness (Mo, T. S., 2019).

The t-test for Narcissism shows a t-value of 1.916 and a p-value of 0.058 ($p > 0.05$), which is not significant. So, there is no significant difference between males and females, in terms of narcissism (H8 rejected). But it is suggesting a marginal trend toward a difference between males and females that might become significant in a larger sample. The near-significant difference for Narcissism might indicate an emerging pattern worthy of further study. In recent years, gender roles and digital behaviors have become more fluid. Social media is now equally integrated into the lives of both males and females, leading to similar usage patterns and psychological responses. In the

comprehensive meta-analysis, "*Gender differences in narcissism: a meta-analytic review*" (k = 355 studies, N = 470,846) grounded in biosocial approach to social role theory found that men are generally more narcissistic than women (d = .26) over time across various age groups (Grijalva et al., 2015).

Discussion on correlation among Social Media Usage, Social Desirability, Narcissism & Loneliness:

From the above correlation matrix table, it can be seen that there is no significant correlation among most of the variables ($p > 0.05$), indicating weak correlations. The only significant correlation was between Social Desirability and Loneliness. Between social desirability and loneliness, $r = -0.232$, $p = 0.020$ ($p < 0.05$) suggesting a negative correlation. So, there is a significant relation exists between social desirability and loneliness (H6 accepted). Individuals who score higher in social desirability tend to report lower levels of loneliness. People who have a higher tendency towards social desirability, often present themselves in a positive light – they might seem to be friendly, cooperative, and socially competent. These traits can help them form and maintain social relationships more easily, which reduces feelings of loneliness. In the study, "*The interrelationship of loneliness, social desirability and academic achievement in Myanmar adolescents: Viewing social desirability from adjustment approach*" examined 549 adolescents from Myanmar explored the relationships between loneliness, social desirability, and academic performance. Utilizing standardized assessment tools, the findings revealed that higher levels of loneliness were associated with lower levels of both social desirability and academic achievement. Additionally, the results indicated a positive connection between social desirability and academic success (Mo, T. S., 2019).

All other correlations were weak and insignificant, indicating that these psychological constructs may operate independently in this sample. But from the above analysis, it is observed that there is a negative correlation between social media usage and social desirability as $r = -0.118$, $p = 0.240$ ($p > 0.05$). So, there is no significant relation between social media usage and social desirability (H2 rejected). But there might be a tendency of the higher the social media usage, the lower will be social desirability. The study titled "*Social networking in adolescents: time, type and motives of using, social desirability, and communication choices*" examines adolescents' use of social network use and voice communication, focusing on preferences and social desirability. Most

participants (83.6%) were aged 17–19 and female (68.9%). Adolescents spent over 3 hours daily on WhatsApp, 2 hours on Instagram, and 35 minutes on Facebook. Females used digital media more. WhatsApp and voice were preferred, especially for negative topics, with motives including boredom and maintaining peer connections. As the social desirability increases, the use of social networking sites in various platforms decreases (Tremolada et al., 2022).

Then, there is a negative correlation found between narcissism and social desirability because $r = -0.030$, $p = 0.765$ ($p > 0.05$). So, there is no significant relation between narcissism and social desirability (H4 rejected). It may be said that presence of higher narcissistic traits tends to indicate lower social desirability. Social desirability bias might reduce the tendency to report negative states like loneliness or high narcissism or high usage of social media platforms. In contrast, individuals high in social desirability tend to underreport negative traits and overreport positive ones. A study entitled "*Adolescent narcissism, aggression, and prosocial behavior: The relevance of socially desirable responding*" explored how socially desirable responding affects self-reports of narcissism, aggression, and prosocial behavior in 161 at-risk adolescents aged 16–19. Social desirability was negatively linked to vulnerable narcissism and aggression and moderated the narcissism-aggression relationship (Barry et al., 2017).

For narcissism and social media usage, there is a positive correlation, was found as $r = 0.071$, $p = 0.482$ ($p > 0.05$). So, there is no significant relation between social media usage and narcissism (H1 rejected). Therefore, there may be a tendency that social media usage might have a positive correlation with narcissism. Narcissistic individuals may have a tendency to portray themselves as the extraordinary one in front of society via social media platforms because it can help them to maintain their exaggerated personality traits in front of the world, so they may tend to avoid face-to-face communications. On self-report measures, narcissists may not feel the need to "fake good" because they already believe they are superior. In the study, "*The effect of social media use on narcissistic behavior*" posits that those who use social media more often are more likely to exhibit narcissistic behavior. The author conducted a survey of 100 students from a private, Midwestern University. The results indicated that time spent on social media does indeed increase narcissistic behavior (Somerville et al., 2015).

In case of loneliness and social media usage, there is a positive correlation observed as $r = 0.165$, $p = 0.102$ ($p > 0.05$). So, there is no significant relation between social media usage (H3 rejected).

This may indicate that higher loneliness may tend to be related with higher uses of social media platforms. In the study entitled "*Social Media and Loneliness--Forever Connected*" examines Facebook usage and loneliness using self-report questionnaires. Contrary to expectations and previous findings, no significant association was found between social media usage and loneliness among participants (Davidovitch et al., 2019).

There is a positive relation between loneliness and narcissism found as $r = 0.167$, $p = 0.097$ ($p > 0.05$). So, there is no significant relation between narcissism and loneliness (H5 rejected). This may indicate that there might be a tendency of the higher the loneliness is, the higher will be narcissism. Individuals with high loneliness may tend to use more social media platforms as they may want to substitute their real-life social interaction via social media exposure but researches show they tend to end up feeling lonelier because of the excessive usage of social media. Narcissistic traits like lack of empathy, manipulativeness, and emotional detachment make it hard for them to build deep, trusting relationships which is because they may end up feeling lonely. A study titled "*Loneliness and narcissism*" examined links between loneliness and narcissism in 696 university students. Loneliness showed varying correlations with narcissism facets—strongly positive with shame, admiration need, and distrust, and strongly negative with indifference. Latent profile analysis revealed that students high in shame, admiration need, and related traits reported greater loneliness (MacDonald et al., 2023).

Participants may have moderated their answers to align with socially desirable norms, potentially impacting the authenticity of the data. Additionally, due to time constraints, the area of data collection was limited, which may restrict the generalizability of the findings. Therefore, further research involving a broader and more diverse sample is necessary to more accurately determine whether the variables are significantly related.

CHAPTER VI

CONCLUDING REMARKS

CONCLUDING REMARKS

Conclusion of the study:

The present study is undertaken to explore the interplay among Social Desirability, Narcissism, and Loneliness in the Context of Social Media Use among young adults in respect to the relationship among all the variables (social media use, social desirability, narcissism, and loneliness) and gender differences (Males & Females). The study was conducted on 99 participants (Males = 49, Females = 50) drawn from the different areas of Kolkata, Malda and its surroundings. The analysis of results as stated and discussed in the previous chapters of this report appear to be interesting, and the major trends of finding obtained therefrom seem to converge on certain points on the basis of which the following conclusion may be drawn.

1. There exists a significant negative correlation between Social Desirability and Loneliness, suggesting that individuals who score higher in social desirability tend to report lower levels of loneliness.

2. There is no significant relation found between males and females in terms of Social Media Usage, Social Desirability, Narcissism, and Loneliness.

3. There is no significant correlation among the variables Social Media Usage, Social Desirability, Narcissism, and Loneliness (except between Social Desirability and Loneliness).

Limitations of the present study:

It is common that there is no end in research work because all endings herald new direction, a new beginning. The limitations of the study basically come from the design, methodology and how the data were collected that influenced the application and the interpretation of the work. The following aspects may be regarded as the limitations of the study:

- Due to time constraints compromise had to be made with the sample size (n = 99).
- Data were collected by using self-administered questionnaires. So, the chance of biasness could not be controlled.
- Only male and female participants are included.
- Personal interview should be taken from the participants to have a better understanding.
- Mainly focused on a particular age group of individuals.
- Influence of different educational background, socio-economic status, residence type, occupation could not be controlled.

Implication of the present study:

The study area on which the investigation has been conducted has its importance because the group is consisted of young adults, who are hustling to establish their personal and professional identities while managing the social and psychological demands of a digitally connected society. The purpose of the study is to assess the correlation between all variables: social media use, social desirability, narcissism, and loneliness and the gender difference (Males & Females) among the variables. So, from the result, it is seen that there is a significant negative correlation between social desirability and loneliness. This suggests that efforts to maintain a socially favorable image could help young adults feel more socially connected, even in highly digital environments. Individuals who strive to present themselves more favorably in social contexts may feel less isolated. It highlights the role of social connectedness and self-presentation in supporting emotional well-being, especially among young adults navigating personal and professional identity development.

Suggestions for further research:

Due to time constraints and other difficulties the study area of the present investigation could not be extended. In today's world the aspects of present study (social media use, social desirability, narcissism, and loneliness) create huge impact on young adults but are not yet investigated adequately in the Indian culture. So, there is enough opportunity for further research. Further research may be taken up in the following areas:

1. Sample can be drawn from different areas to get a clear view about the social media use and other psychological constructs of young adults.
2. Qualitative methods and quantitative methods both can be used to enhance the quality of the work.
3. Other genders can be included for a broader understanding of the influences of all variables across diverse gender identities.
4. Interaction of other personality traits (e.g., introversion, extroversion, neuroticism) with social media use and impact feelings of loneliness or tendencies toward narcissism.
5. Expanding the sample beyond young adults to include adolescents and older adults can shed light on how age moderates the relationship between these variables.
6. Investigating these variables across different cultural contexts would provide insight into how cultural norms and values shape social media behavior, expressions of narcissism, and experiences of loneliness.
7. Different social media platforms (e.g., Instagram, TikTok, Snapchat, Facebook) may foster unique patterns of behavior. Further research could explore how specific platforms influence or moderate these psychological variables.
8. Impact of different educational background, socio-economic status, residence type, occupation with Social Media Usage, Social Desirability, Narcissism, and Loneliness can make the work more insightful.

CHAPTER VII

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CHAPTER VIII

APPENDICES

Appendix A

CONSENT FORM

I [respondent's name], _____ hereby given my permission to **Sohini Satiar** (researcher) to allow me to respond to the questionnaires and quote my responses in a scholarly research paper. I understand that their work is for academic purposes.

I also understand that I waive any claim for copyright to this material should the researchers ever publish it in a scholarly journal or in electronic formal online.

I understand that Research Title is **The Relationship between Social Media Usage, Social Desirability, Narcissism & Loneliness on Young Adults.**

I also understand that the researcher, hereby named **SOHINI SATIAR**, will maintain my **anonymity** with regard to my responses to Questionnaire items.

I hereby give my permission in the form of my signature below:

Signature: _____

Date: _____

Appendix B

SOCIO-DEMOGRAPHIC FORM

1. Name:
2. Age:
3. Sex: Male ( ) Female ( ) Other ( )
4. Religion:
5. Educational Qualification: 10^{th} /12^{th} / Graduation / Masters / Others: _____
6. Occupation:
7. Type of Family: Nuclear /Extended / Joint / Broken-home
8. Type of Residential Area: Urban / Sub-urban / Rural
9. Relationship Status: Married / Unmarried
10. Monthly Income:
11. Mention if you have any diagnosed Chronic Physical Illness / Condition:

12. Mention if you have any diagnosed Chronic Psychiatric / Psychological Illness / Condition:

13. Mention if you are under any Regular Medication:

14. Date of the Data Collection:
15. Place of Current Residence:
16. E-mail Id:
17. Contact No.:

Appendix C

Bergen Social Media Addiction Scale

Below are some questions regarding your relationship with *social media* and how you use it (*Facebook*, *Twitter*, *Instagram*, etc.). For each question, read carefully and choose the response that best describes you.

During the last year, how often...

	Very Rarely	Rarely	Sometimes	Often	Very Often
1. You spend a lot of time thinking about social media or planning how to use it.	1	2	3	4	5
2. You feel an urge to use social media more and more.	1	2	3	4	5
3. You use social media in order to forget about personal problems.	1	2	3	4	5
4. You have tried to cut down on the use of social media without success.	1	2	3	4	5
5. You become restless or troubled if you are prohibited from using social media.	1	2	3	4	5
6. You use social media so much that it has had a negative impact on your job/studies.	1	2	3	4	5

Appendix: The Social Desirability Scale-17 (SDS-17)

Instruction

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, check the word "true"; if not, check the word "false".

Items

1. I sometimes litter.
2. I always admit my mistakes openly and face the potential negative consequences.
3. In traffic I am always polite and considerate of others.
4. I have tried illegal drugs (for example, marijuana, cocaine, etc.).
5. I always accept others' opinions, even when they don't agree with my own.
6. I take out my bad moods on others now and then.
7. There has been an occasion when I took advantage of someone else.
8. In conversations I always listen attentively and let others finish their sentences.
9. I never hesitate to help someone in case of emergency.
10. When I have made a promise, I keep it--no ifs, ands or buts.
11. I occasionally speak badly of others behind their back.
12. I would never live off other people.
13. I always stay friendly and courteous with other people, even when I am stressed out.
14. During arguments I always stay objective and matter-of-fact.
15. There has been at least one occasion when I failed to return an item that I borrowed.
16. I always eat a healthy diet.
17. Sometimes I only help because I expect something in return.

Note

Answer categories are "true" (1) and "false" (0). Items 1, 4, 6, 7, 11, 15, and 17 are reverse keyed. Item 4 was deleted from the final version of the SDS-17.

Appendix E

Narcissistic Personality Inventory – 16

Read each pair of statements below and place an "X" by the one that comes closest to describing your feelings and beliefs about yourself. You may feel that neither statement describes you well, but pick the one that comes closest. **Please complete all pairs**.

1. ___ I really like to be the center of attention
   ___ It makes me uncomfortable to be the center of attention

2. ___ I am no better or no worse than most people
   ___ I think I am a special person

3. ___ Everybody likes to hear my stories
   ___ Sometimes I tell good stories

4. ___ I usually get the respect that I deserve
   ___ I insist upon getting the respect that is due me

5. ___ I don't mind following orders
   ___ I like having authority over people

6. ___ I am going to be a great person
   ___ I hope I am going to be successful

7. ___ People sometimes believe what I tell them
   ___ I can make anybody believe anything I want them to

8. ___ I expect a great deal from other people
   ___ I like to do things for other people

9. ___ I like to be the center of attention
   ___ I prefer to blend in with the crowd

10. ___ I am much like everybody else
    ___ I am an extraordinary person

11. ___ I always know what I am doing
    ___ Sometimes I am not sure of what I am doing

12. ___ I don't like it when I find myself manipulating people
    ___ I find it easy to manipulate people

13. ___ Being an authority doesn't mean that much to me
    ___ People always seem to recognize my authority

14. ___ I know that I am good because everybody keeps telling me so
    ___ When people compliment me I sometimes get embarrassed

15. ___ I try not to be a show off
    ___ I am apt to show off if I get the chance

16. ___ I am more capable than other people
    ___ There is a lot that I can learn from other people

Appendix F

TABLE 1
UCLA Loneliness Scale (Version 3)

Instructions: The following statements describe how people sometimes feel. For each statement, please indicate how often you feel the way described by writing a number in the space provided. Here is an example:

How often do you feel happy?

If you never felt happy, you would respond "never"; if you always feel happy, you would respond "always."

NEVER	RARELY	SOMETIMES	ALWAYS
1	2	3	4

*1.	How often do you feel that you are "in tune" with the people around you?	_____
2.	How often do you feel that you lack companionship?	_____
3.	How often do you feel that there is no one you can turn to?	_____
4.	How often do you feel alone?	_____
*5.	How often do you feel part of a group of friends?	_____
*6.	How often do you feel that you have a lot in common with the people around you?	_____
7.	How often do you feel that you are no longer close to anyone?	_____
8.	How often do you feel that your interests and ideas are not shared by those around you?	_____
*9.	How often do you feel outgoing and friendly?	_____
*10.	How often do you feel close to people?	_____
11.	How often do you feel left out?	_____
12.	How often do you feel that your relationships with others are not meaningful?	_____
13.	How often do you feel that no one really knows you well?	_____
14.	How often do you feel isolated from others?	_____
*15.	How often do you feel you can find companionship when you want it?	_____
*16.	How often do you feel that there are people who really understand you?	_____
17.	How often do you feel shy?	_____
18.	How often do you feel that people are around you but not with you?	_____
*19.	How often do you feel that there are people you can talk to?	_____
*20.	How often do you feel that there are people you can turn to?	_____

Scoring:
Items that are asterisked should be reversed (i.e., 1 = 4, 2 = 3, 3 = 2, 4 = 1), and the scores for each item then summed together. Higher scores indicate greater degrees of loneliness.

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